

Triangularwave Technologies, Inc. (TWT®)

Versatile Fluid Management Products & Systems To Effectively Meet The Needs Of Any Industry & Application

- Control Scale Deposits
- Bacteria
- Corrosion
- Algae
- Colloids

In All Fluid Based Systems

Potable Water, Process and Waste Water Treatment & Conditioning

PROTECTION FOR NEW EQUIPMENT

TWT provides new equipment with the ability to enhance the product features and benefits

TREATMENT FOR EXISTING EQUIPMENT

Retrofit existing equipment to improve its operating efficiency and life cycle

ENHANCE PRODUCT LINE

Enter new markets and broaden customer satisfaction

CUSTOM DESIGN

Let TWT, Inc. custom design a fluid management system to meet any industry specific application

- Residential
- Commercial
- Industrial

TS83

Do You Have An Effective Water Treatment System?

Lots of Companies Provide Products and Systems...TWT, Inc. Senses Environmental Needs with Intelligent Solutions!

The Green Market Answer: Chemical-Free



Filtration



Hard Water Conditioning & Treatment

Disinfection & Purification



Versatile Fluid Management Systems To Effectively Meet The Needs Of Any Application

Residential • Commercial • Industrial Treatment

P.O.E (Point-Of-Entry) • P.O.U. (Point-Of-Use) • Application & Installation

Specializing in:

- Chemical-Free Deposit Control Systems (hard water conditioning & treatment). Eliminating Scale Deposits and Bio-Film in Pipes, Fixtures and Equipment
- Ultraviolet / Ozone / Disinfection & Purification Systems
- Ionization Purification Systems
- Custom Systems Design & Integration
- Water Filtration Products
- Bacterial Reduction Systems
- Economical & Cost Effective
- For All Fluid- Based Industries

Triangularwave Technologies, Inc. products and systems provide technologically advanced methods for water and fluid management that are both efficient and cost-effective. Components and subsystems chosen from across the range of treatment methods can be combined in different configurations to provide custom solutions specific to any industry, site or application.

TWT systems work to consistently deliver high quality water, reduce scale and bio-fouling in plumbing systems, and to increase efficiency of both once-through and re-circulating HVAC, process cooling, agriculture, industrial processing, wastewater and other fluid based systems. Each product line offers a variety of both standalone and comprehensive treatment solutions for end-to-end fluid management, for all types of applications.

Hard Water Problems Solved Easily!

The patented Triangularwave Deposit Control Systems use advanced integrated circuitry and signal processing to create a complex frequency and amplitude modulated wave form. A complex and changing electrical field is induced in the pipe, which increases the solubility of the minerals and changes the shape and size of the calcium carbonate crystals. By this reaction, the crystals lose their adhesive properties, remain in sub-micron suspension, and pass harmlessly through the pipe. Existing scale deposits are taken into solution and also pass harmlessly through the pipe.

Triangularwave Deposit Control Systems offer all the positive effects of soft water, and clean up existing deposits, without the use of traditional salts and chemicals. Their full treatment benefits are realized, with reduced maintenance requirements.

TWT® Technologically Advanced Methods for Water & Fluid Management Potable Water, Process and Waste Water Treatment & Conditioning

- Provides the effects of softened water, neutralizes calcium hardness effects in the water
- Removes and prevents scale buildup
- Uses no salts or other chemicals
- Service and maintenance-free

- Improves efficiency of all water-fed equipment and extends its life cycle
- Quickly pays for itself and continues saving
- Descales the entire plumbing system over time
- Designed for safety—the output is safe to both personnel and equipment. There is no electrical contact with the pipe

Partial List of Applications:

- Cooling Towers • Heat Exchangers
- Biofilm & Bacteria Control for Medical/Dental Environments
- Commercial Irrigation • Condensers & Chillers
- Food Processing Equipment
- Manufacturing Processing Equipment • Spray Systems
- Private & Commercial Swimming Pools & Spas
- Residential /Office Plumbing • Coffee & Tea Dispensers
- Bottleless Water Coolers • Washing Machines
- Humidifiers • Small Water-Fed Appliances
- Lawn & Sprinkler Systems • Mobile Homes
- Boilers/Water Heaters • Marine Industry / House Boats
- Steamers Systems • Breweries • Aquariums
- All other Water and Fluid-Based Applications

TWT chemical-free deposit control (hard water conditioning & treatment) systems enhance other treatment technologies as well, including chemicals, ozone, ultraviolet, separators and other filtration systems, keeping them clean and enhancing their operation. In this way, their full treatment benefits are realized, with reduced maintenance requirements

Consider using TWT deposit control systems in conjunction with any fluid treatment systems as a complementary technology. For further details on how you can leverage the TWT deposit control benefits, please contact us..

Simply Said... a clean, corrosion-free delivery system is restored and maintained in an environmentally safe and chemical-free manner.

The result is clean pipes and tubing with no biofilm and reduced bacterial contamination.



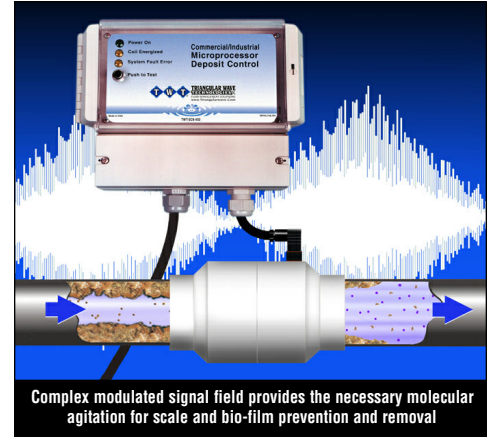
Water & Energy Conservation for Future Generations!

TWT Systems are Undeniably Significant From Operational, Economical, and Safety Points-Of-View.



HARD DOLLARS SAVINGS- Chemicals, Salts Water & Energy

- Usage reductions of around 90% or more are typical.
- **Water In** - typically the HVAC industry concentration ratio can be increased from 2-3 to 6-8 (while still reducing the chemical consumption), indicating an annual make-up water savings of 60% or more. Savings would include conservation incentives.
- **Water Out** - volume of discharged water is reduced proportionately, along with the fees. Depending on actual chemical, salt use reduction and local laws, further savings may be possible if blow down water can be recycled and/or sent directly to the sewer system.



WHERE IS THE WATER?

97%
SALT WATER

2%
TRAPPED IN ICEBERGS

1%
FRESH WATER

WATER USES & ENVIRONMENTAL CONCERNS...



10% INDUSTRIAL



21% MUNICIPAL



69% Agricultural



Polluted Discharge

Problem:

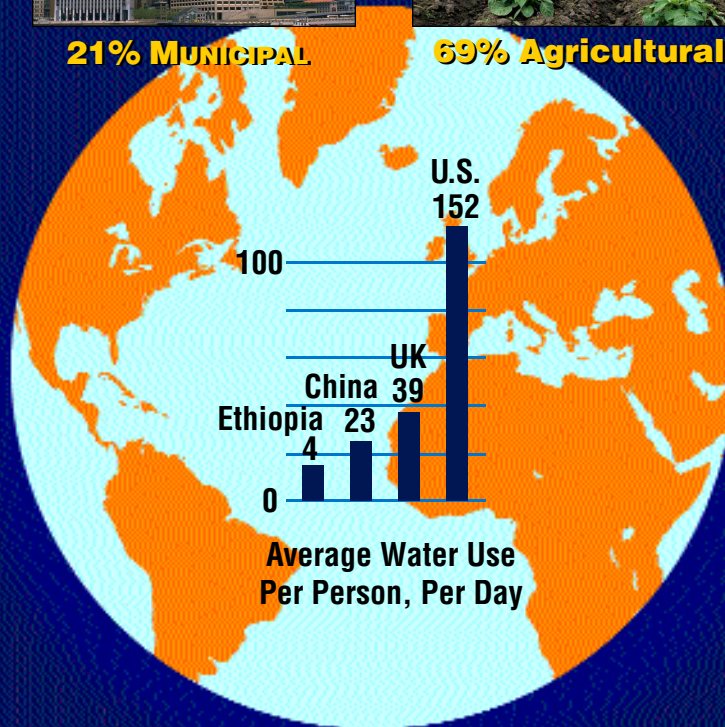
5.3 Billion People will suffer from water shortages by 2025

48

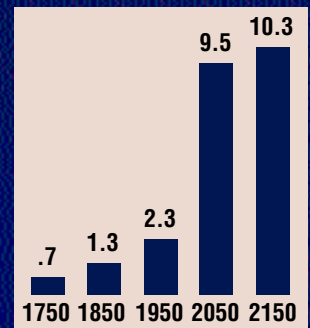
UN estimate of the number of nations that will face fresh water stress or scarcity by 2025

80 Million

Average yearly population growth



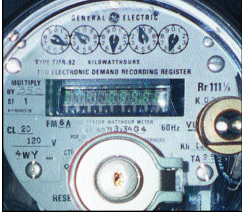
Problem:



World Population Growth in Billions

Source information as written in industry trade publication

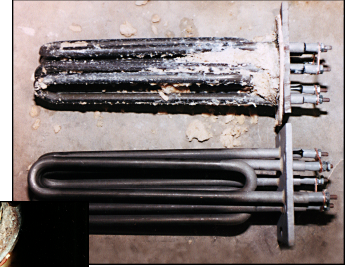
The Return On Investment of a TWT System is Undeniably Significant From Operational, Economical, and Safety Points-Of-View.



- **Energy** - systems have been found to deliver between 5 and 15 % energy savings when compared to a well functioning chemical system because the controller adapts to changes in water conditions without operator intervention. Energy savings can be much higher (up to 40 %) vs. a poorly performing chemical system or no chemical system at all.

SOFT DOLLARS - Materials, Labor, Time, Safety

- Chemical, salt handling and storage costs - reduced material and labor costs, freed-up storage space and cost allowance for increased safety (risk reduction). Reduction comparable to chemical cost reduction (up to 90 %).
- Maintenance, repair, replacement and downtime costs (chemical & salt delivery systems) - due to reduced usage rate. Reduction comparable to chemical and salt cost reduction (up to 90 %).
- Maintenance, repair, replacement and downtime costs (plumbing system, tower and cooling systems) - due in part to the adaptability described above under "Energy". Cleaning of the system and/or during shut down is also generally easier with TWT technology, as any film on any surface can be easily removed with a soft cloth. Additionally, the lower level of chemicals in the system will make it safer for workers doing the cleaning (75-90 %).



LIFECYCLE SAVINGS

- Savings continue typically for 10 years or more from date of installation. Savings accelerate after the payback period and continue for the life of the system. Lifecycle savings are thus typically many times the cost of the TWT System.

HARD DOLLARS

- Can be estimated from purchase records or water volume and prices from the previous year.

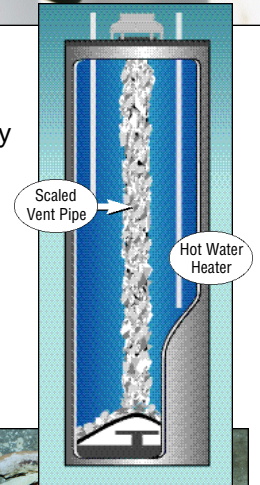
SOFT DOLLARS

- Costs should be estimated based on the average of 10 years of data, or the age of the system if less than 10 years old, to smooth out the effect of infrequent repairs and replacements.

LIFECYCLE SAVINGS

- Are calculated as the net present value of the sum of the annual savings over 10 years using a reasonable interest rate (e.g. prime plus 2 %).

TYPICAL PAYBACK is less than 2 years when considering **HARD DOLLARS ONLY**.



Scale
Removed from
a Hot Water
Plumbing
and Heating
Systems



TWT: The Ultimate in Chemical-Free Water Treatment & Conditioning

TWT, Inc. offers a full range of products & systems designed to address fluid problems wherever fluid flows. From patented deposit control technology to pre and post filtration needs, ionization, disinfection, and ultraviolet purification treatment and conditioning, TWT has the versatile, efficient, cost-effective methods to solve your fluid management problems end to end.

Triangularwave Technologies, Inc.(TWT)

Sensing Environmental Needs with Intelligent Solutions

Be Smart, Buy Once! Go Green Save Green

Sensing Environmental Needs With Intelligent Solutions The Difference in Technology Matters!

Join our team, enter new markets, introduce new products, manage customer expectations and add more dollars to their bottom line!

TWT The Environmentally Friendly "Green Market" Solution!

See these technologically advanced products, systems and treatment methods for yourself—
Visit www.triangularwave.com
www.twtwatertreatment.com

The Triangularwave Technologies, Inc. team consists of a diverse group of bright individuals with years of experience, who combine their talents as a team, revolutionizing the way water/fluid management products & systems are engineered, designed, distributed and installed.

Don't Wait...Contact us today for the distributor near you, for a free consultation and/or for information on what TWT system will meet your industry specific application and treatment needs.

Value Added Technology



TWT makes sense from an operational, economical and safety point-of-view.

Thank you,
The team at TWT, Inc.



No Matter How Tough The Job...TWT® Has The Solution

TWT® The Ultimate in Chemical-Free Water Treatment & Conditioning

The green way